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D R A F T

7 December 1965

MEMORANDUM FOR THE RECORD

SUBJECT: Recommendation that the [redacted] Change Detector be turned over to GIMRADA. 25X1A

REFERENCES:

A. Memorandum for the Chief, Technical Plans and Development Staff from [redacted] dated 21 March 1962. 25X1A

B. Memorandum for the Commanding Officer, GIMRADA from Arthur C. Lundahl, dated 5 June 1962.

C. Letter to Chief, Plans and Programs Division, NPIC, from [redacted] Acting Chief, Intelligence Division, GIMRADA, dated 11 August 1965. 25X1A

1. Both reference (a) and reference (b) cited above mention the fact that GIMRADA was the organization which was originally interested in the development of the Change Detector, but that they were financially unable to underwrite the proposed effort. In 25X1A [redacted] memo he states that [redacted] (of GIMRADA) has now accumulated 25X1A fairly strong evidence from several sources, which indicates that the Change Detector will be of great value to interpretation units other than ourselves..." and "Whilst the Change Detector as such will not primarily be a tool for our use, etc. etc." As recently as the late summer of 1965 GIMRADA requested, in reference (c) above, permission from us allowing them to refer to the Change Detector concept as something developed in their office and that GIMRADA is currently working on the application of Change Detector to map revision. Fairly obviously, they still are interested in the device.

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2. At NPIC, on the other hand, virtually all interest in the device as a piece of operational equipment has been killed both because of its extremely limited resolution capabilities as well as because very few operationally oriented PI's can see even a potential need for such a device. At least in theory, a "change detecting" device seems as if it might be useful, but the mechanical, optical and electronic problems of film handling and manipulation and the loss of fine detail which takes place in the electronic scanning operation seem to be so formidable as to make this device of very little potential use to the PI's. In spite of all sorts of variations in target and camera orientation, aspect angle, sun angle (and, therefore, shadow pattern), snow cover, image density, etc. the experienced PI can make visual comparisons between two photos taken at different times and he can then go on and detect significant changes, usually with a minimum loss of time. Whereas the "pre-normalization" of the imagery required by the prototype device, before it can do a very good job, requires an expenditure of a great deal of time and, in the case of oblique coverage, it is often impossible to get two images to the point where they can be compared in a manner which will permit the detection of change. When the change detector does display "changes" they often are insignificant ones due to sun angle differences or vegetation differences, etc. The experienced interpreter can immediately discard as irrelevant many of the "changes" which a detector accentuates. Change detection is one of the difficult tasks that has to be done, but it is being done.

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3. Since NPIC does not have much interest in the Change Detector and GIMRADA does, it is therefore recommended that the device officially be turned over to [redacted] 25X1A

[redacted] 25X1A

Development Branch, P&DS

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P&DS/DB TYPING SLIP

Title Memo for Record

Classification CONF Project No. _____

25X1A

Originator [redacted] Date 6 Dec '65

_____ Chief (ISS) (SSS) Initials _____ Date _____

✓ Type Rough Date 7 Dec '65

_____ Deputy Chief/DB Initials _____ Date _____

_____ Chief/DB Initials _____ Date _____

_____ Asst for P&DS Initials _____ Date _____

_____ Type Smooth Date _____

Date of Final Disposition _____

Return this slip to originator after final disposition.

Jim, Hold this for future submittal per our discussion.

Paul